USABILITY ANALYSIS IN MILITARY SETTINGS: HOW ADVANCED WEARABLE COMPUTERS COULD AFFECT COMMUNICATION, DECISION MAKING AND OPERATIONS

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ABSTRACT

Both the market and academia strongly encourage the development of usable systems, and they do so by relying on a number of standards, guide-lines, research and good practice streams. Unfortunately, the military sector, whilst being the owner of standards under many purposes and topics, seems still falling and running behind as the conceptual issues and practical implications of usability are concerned. In our paper, usability has been analytically investigated throughout a simulated military operation setting and against a mock-up prototype wearable computing device, and several provoking conclusions in terms of "rethinking usability" applied to military operations and decision making have been derived. We expect that many stakeholders from within the whole sector (the "defence" industry) can leverage this study as a first step to challenge existing cultural, political, economical and even ethical biases and constraints acting against the full exploitation of usability potential. .

KEYWORDS: HCI, Military Device, Prototyping, Wearable Computer, Usability.